Yunyu Liu

2554 Madrone Drive, West Lafayette, IN, 47906 | wenwen0319.github.io | +1 857-891-9682 | wenwen0319@hotmail.com

EDUCATION

09/2020 - now Purdue University, Indiana, USA

Ph.D., Major: Computer Science Advisor: Benes Bedrich

09/2018 - 05/2020 Northeastern University (NEU), Boston, USA

M.S., Major: Computer Engineering Advisor: Yun Raymond Fu

09/2014 - 07/2018 Shanghai Jiao Tong University (SJTU), Shanghai, China

B.Eng., Major: Electrical Engineering Minor: Finance

SELECTED PUBLICATIONS (MORE CAN BE FIND HERE)

01/2022 Yunyu Liu, Jianzhu Ma, Pan Li, "Neural Predicting Higher-order Patterns in Temporal Networks," WWW 2022

- 09/2021 Lichen Wang, Bo Zong, **Yunyu Liu**, Can Qin, Wei Cheng, Wenchao Yu, Xuchao Zhang, Haifeng Chen, Yun Fu, "Aspect-based Sentiment Classification via Reinforcement Learning," ICDM 2021
- 01/2021 Yanbang Wang, Yen-Yu Chang, **Yunyu Liu**, Jure Leskovec, Pan Li, "Inductive Representation Learning in Temporal Networks via Causal Anonymous Walks," ICLR 2021
- 07/2020 **Yunyu Liu**, Lichen Wang, Yue Bai, Can Qin, Zhengming Ding, Yun Fu, "Generative View-Correlation Adaptation for Semi-Supervised Multi-View Learning," ECCV 2020
- 08/2019 Lichen Wang, Zhengming Ding, Zhiqiang Tao, **Yunyu Liu**, Yun Fu, "Generative Multi-View Human Action Recognition," ICCV 2019 (Oral)
- 05/2018 **Yunyu Liu**, Zhiyang Xia, Ping Yi, Wei Wang, Yao Yao, Ting Zhu, Tiantian Xie, "GENPass: A General Deep Learning Model for Password Guessing with PCFG Rules and Adversarial Generation," ICC 2018

WORKING EXPERIENCE

Shanghai LiveSine Corporation,

Jul 2016 - Sep 2016

Position: Internship, R&D, Developed a Data Transfer Unit (DTU) with Bluetooth

- Designed and built a DTU chip with Bluetooth and TCP/IP service.
- Designed a corresponding APP which can communicate with the DTU by Bluetooth and with the server by TCP/IP.

SCIENTIFIC RESEARCH EXPERIENCE

Purdue University, CGV Lab, Advisor: Benes Bedrich

Jan 2021 – now

Single shot terrain generation

- Analyze digital elevation maps (DEM) using traditional algorithms and graph neural networks to get ridges and valleys.
- Learn one single terrain image and generate similar terrain using hypergraph.

Purdue University, GCoM, Advisor: Pan Li

Sep 2020 – Dec 2021

Pattern prediction in the temporal network

- Developed a technique named causal anonymous walk to extract the temporal information efficiently and effectively.
- Defined the interaction expansion of three nodes (a triplet) in a temporal hypergraph.
- Designed a model to find what type of, when, and why the interaction happens among a triplet.

Northeastern University, Synergetic Media Learning Lab, Advisor: Yun Raymond Fu

Oct 2018 – Aug 2020

Semi-supervised Multi-view Learning

- Employed generative models and domain adaptation to the multi-view learning to fully explore multi-view information.
- Proposed a graph-based method for the label-level fusion.
- Utilized information entropy to help the fusion.

Multi-aspect Sentiment Classification (Collaborate with NEC lab)

- Developed a reinforcement learning model to accurately align the task-relevant words with aspects.
- Developed an end-to-end pipeline for the agents to explores paths from target aspect nodes to their potential sentimental regions based on minimum spanning tree algorithm.